

## REMARKS

The specification and pending claims of the application have been amended to correct errors and in connection with objections by the Examiner. Claims 1-2, and 5-22 were pending in this application and were rejected on various grounds. Claim 1 has been amended. Claims 3, 7, and 16-22 have been cancelled without prejudice or disclaimer for pursuit of their subject matter in latter continuation or divisional filings. Claims 1-2, 4-6, and 8-15 are therefore presented for further examination. No new matter has been added by the amendments. The changes made to the specification and claims by the current amendment, including deletions and additions, are shown herein with ~~deletions~~ designated with a strikethrough and additions underlined.

Applicants would like the Examiner to note that Claim 3 has been cancelled and Claim 4 is dependent on Claim 1. Thus, rejoinder of Claim 4 should be considered on allowance of Claim 1 as a linking claim. As argued in the response filed December 26, 2003 to Paper No. 7, MPEP 809.03 and 809.04 require that the restriction be withdrawn on allowance of the linking claims.

### **Objections to the claims**

Claims 2, 6-7, 9, 11-13, and 15 were objected to as having an improper article at the start of the claims. Claim 7 has been cancelled and the remaining claims amended to provide a proper article at the start of the claim. In view of the foregoing amendments, withdrawal of the objection to the claims is warranted.

### **Rejections under 35 U.S.C. §112, first paragraph- enablement**

The Examiner has maintained her rejection of claims 1, 5 and 7-15 under 35 U.S.C. 112, first paragraph, with regards to plasmids pPCV91-MiAMP1 and pET-MiAMP1 and with regards to the terms “variant” or “homologue” of *Proteaceae* proteins. Without acquiescing to the Examiner’s rejection, Applicants have removed the language relating to “homologues” and “proteaceae” from the claims to be pursued in later applications.

With reference to “variants”, Applicants have amended claim 1 identify the specific variants as variants “having one or more of the following substitutions: K is substituted for Q at position 54, 65 or 72, or V or K is substituted for H at position 80”. The Examiner agreed at the interview that the specification teaches selective substitution or deletion of residues with substitutions being based on knowledge of what changes would not be expected to destroy anti-

bacterial activity. By following the teachings of the instant specification, the person of ordinary skill in the art would be confronted with no more than a routine amount of work in developing and evaluating nucleic acids encoding variants and homologues of SEQ ID NO: 1.

Thus, Applicants submit that the full scope of the amended claims are enabled.

#### **Rejections under 35 U.S.C. §112, first paragraph- written description**

In paragraph 12 of the Action, the Examiner has maintained her rejection of claims 1, 5 and 7-15 under 35 U.S.C. 112, first paragraph, under the written description requirement. As noted above, the claims as amended are drawn to SEQ ID NO:2, variants encoding SEQ ID Nos: 15-21, and variants “having one or more of the following substitutions: K is substituted for Q at position 54, 65 or 72, or V or K is substituted for H at position 80”. Thus, Applicants were clearly in possession of the genus claimed at the time the application was made and respectfully request that the instant rejection of claims 1, 5 and 7-15 under 35 U.S.C. 112, first paragraph, be withdrawn.

#### **Rejections under 35 U.S.C. §112, second paragraph**

The Examiner has rejected claims 1-2 and 5-15 under 35 U.S.C. 112, second paragraph, as being indefinite for the recitation of “homologue”. However, this language has been removed from the claims, rendering this rejection moot.

The Examiner similarly contends that claims 1 and 14 in part (iii) are indefinite in their recitation of “variant”. Applicants have amended claim 1 to specify variants “having one or more of the following substitutions: K is substituted for Q at position 54, 65 or 72, or V or K is substituted for H at position 80”, thus rendering the rejection moot.

The Examiner believes Claims 1 and 14 (part iv) indefinite for recitation of “specifically reacts” and “essentially the same”. However, these terms have been removed from the claims rendering the rejections moot.

In view of the foregoing comments and the relevant claim amendments, Applicants respectfully request that the 35 U.S.C. 112, second paragraph, rejection of claims 1-2 and 5-15 be withdrawn.

**Rejections under 35 U.S.C. §102(b)**

The Examiner has maintained her rejection of claims 1, 5, 8-11 and 13-15 under 35 U.S.C. 102(b) as being anticipated by Terras *et al.* (1995, *The Plant Cell*, Vol. 7, pp. 573-588). The Examiner asserts that Terras *et al.* teach a radish nucleic acid encoding an anti-microbial protein that would be a “variant” or “homologue” of SEQ ID NO: 1. Applicants respectfully disagree.

As indicated above, the reference to a “homologue” has been removed from the claims and the variant specifically claimed as: “having one or more of the following substitutions: K is substituted for Q at position 54, 65 or 72, or V or K is substituted for H at position 80”. The radish nucleic acid of Terras *et al.* does not correspond to the sequences as claimed in the amended claims and thus withdrawal of the 35 U.S.C. 102(b) rejection of claims 1, 5, 8-11 and 13-15 on the basis of the foregoing citation is respectfully requested.

**Rejections under 35 U.S.C. §103(a)**

The Examiner has rejected claims 1, 5 and 8-15 under 35 U.S.C. 103(a) as being unpatentable over Terras *et al.* in view of Gordon-Kamm *et al.* (1990, *The Plant Cell*, Vol. 2, pp. 603-618). The Examiner contends that at the time the invention was made, “it would have been obvious to one of ordinary skill in the art to modify the method of producing pathogen-resistant plants as taught by Terras *et al.*, to transform the nucleic acid into maize as described in Gordon-Kamm *et al.*”.

Applicants have pointed out above that the Terras *et al.* disclosure is not an anticipation of any claim of the instant application. The 35 U.S.C. 103(a) rejection on the basis of Terras *et al.* in view of Gordon-Kamm *et al.* is therefore not legitimate. In any case, modifying the method of Terras *et al.* as taught by Gordon-Kamm *et al.* would still not provide grains, vegetables or oil-seed plants transformed with the nucleic acid of the instant claims.

In view of the foregoing comments, Applicants respectfully request that the objection be withdrawn.

**Conclusion**

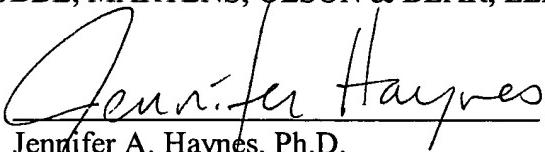
Should there be any further questions regarding the above-captioned patent application, the Examiner is respectfully requested to contact the undersigned agent at the telephone number below. Please charge any additional fees, including any fees for additional extension of time, or credit overpayment to Deposit Account No. 11-1410.

Respectfully submitted,

KNOBBE, MARTENS, OLSON & BEAR, LLP

Dated: August 23, 2004

By:



Jennifer A. Haynes, Ph.D.  
Registration No. 48,868  
Agent of Record  
Customer No. 20,995  
(415) 954-4114